

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Xie et al.

Application No.: 10/786,787

Examiner: Hanley, John C.

Filed: February 24, 2004

Group Art Unit: 2856

For: INTEGRATED MONOLITHIC TRI-AXIAL MICROMACHINED ACCELEROMETER



INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to the Duty to Disclose under 37 C.F.R. §1.56, Applicants hereby disclose information that may be relevant to the Examiner's consideration of the above-identified application and the patentability of its claims.

The Supplemental IDS is being submitted after the first office action was mailed but before a final office action. An authorization to charge the \$180.00 fee required by 37 C.F.R. 1.97(c)(2) to Deposit Account No. 50-0951 is provided herewith. No additional fees are believed due; however, the Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, to Deposit Account No. 50-0951.

Respectfully submitted,

Date:

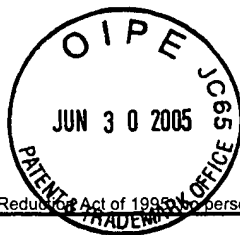
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Docket No.: 5853-345

Neil R. Jetter, Reg. No. 46,803
Akerman Senterfitt
222 Lakeview Avenue, Suite 400
Post Office Box 3188
West Palm Beach, FL 33402-3188
Phone: 561.653.5000
Fax: 561.659.6313



PTO/SB/08A (04-03)

Approved for use through 04/30/2003. OMB 0651-0031

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/786,787
Filing Date	February 24, 2004
First Named Inventor	Xie et al.
Art Unit	2856
Examiner Name	Hanley, John C.
Attorney Docket Number	5853-345

Sheet 1 of 3

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 5,501,893	03/26/1996	Laermer et al.	
		US- 5,717,631	02/10/1998	Carley et al.	
		US- 5,719,073	02/17/1998	Shaw et al.	
		US- 5,970,315	10/19/1999	Carley et al.	
		US- 6,088,907	07/18/2000	Lee et al.	
		US- 6,214,633	04/10/2001	Clark et al.	
		US- 6,681,063	01/20/2004	Kane et al.	
		US- 6,737,648	05/18/2004	Fedder et al.	
		US- 2004/0166688	08/26/2004	Xie et al.	
		US- 2004/0195096	10/07/2004	Tsamis et al.	
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
		WO 02/43148 A2	05/30/2002			

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		Art Unit	2856		
		Examiner Name	Hanley, John C.		
Sheet	2	of	3	Attorney Docket Number	5853-345

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
		Xie, Huikai, "Gyroscope and Micromirror Design Using Vertical-Axis CMOS-MEMS Actuation and Sensing," PhD. Thesis, Carnegie Mellon University, 2002.		
		Xie et al., "A DRIE CMOS-MEMS Gyroscope," IEEE Sensors 2002 Conf., June 12-14, 2002.		
		Xie et al., "Endoscopic optical coherence tomographic imaging with a CMOS-MEMS micromirror," Sensor and Actuators A 103, 2003, pp. 237-241.		
		Xie et al., "A CMOS Z-Axis Capacitive Accelerometer with Comb-Finger Sensing", in The 13th Annual International Micro Electro Mechanical Systems Conference - continued below		
		Continued from above - (MEMS '00, Miyazaki, Japan, Jan. 23-27, 2000, pp. 496-501.		
		Xie et al., "A CMOS-MEMS Lateral-axis Gyroscope", Technical Digest. The 14th IEEE International Conference on Micro Electro Mechanical Systems - MEMS 2001, - continued below		
		Continued from above - Interlaken, Switzerland, Jan. 21-25, 2001, p. 162-165.		
		Xie et al., "Vertical Comb-finger Capacitive Actuation and Sensing for CMOS-MEMS", Sensors & Actuators: A, Vol. 95 (2002), pp. 212-221.		
		Xie et al., "Design and fabrication of an integrated CMOS-MEMS 3-axis accelerometer", The 2003 Nanotechnology Conference and Trade Show, San Francisco, CA, - continued below		
		Continued from above - Feb. 23-27, 2003, p. 292-295.		

Examiner Signature		Date Considered	
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1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Sheet	3	of	3

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		Qu et al., "A Single-crystal Silicon 3-axis CMOS-MEMS Accelerometer," IEEE Sensors 2004, Vienna, Austria, Oct. 24-27, 2004.	
		Lemkin et al., "A 3-axis surface Micromachined Sigma Delta accelerometer", Technical Digest of 1997 IEEE International Solid-State Circuits Conference. - continued below	
		Continued from above - (ISSCC '97); San Francisco, CA, USA, 6-8 Feb. 1997 p. 202-3.	
		Chae et al., "A Monolithic 3-Axis Silicon Capacitive Accelerometer with Micro-g Resolution," The Proceedings of the 12th International Conference Solid-State - continued below	
		Continued from above - Sensors, Actuators and Microsystems (TRANSDUCERS '03), Boston, MA, June 2003.	

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